



AF/3677

Please type a plus sign (+) inside this box → ☐

PTO/SB/21 (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>	Application Number	09/542,897
	Filing Date	April 4, 2000
	First Named Inventor	Jerry H. Chisnell
	Group Art Unit	3677
	Examiner Name	M. Rodgers
Total Number of Pages in This Submission	Attorney Docket Number	FTP141A US

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		Appendix in Triplicate, \$320.00 check and Postcard.

GROUP 3600

RECEIVED  
OCT 07 2002

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Remy J. VanOphem
Signature	
Date	September 25, 2002

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: September 25, 2002			
Typed or printed name	Remy J. VanOphem	Date	September 25, 2002
Signature			

Burden Hour Statement: This form is estimated to take 0.3 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/17 (11-01)  
Approved for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 320.00)

## Complete if Known

Application Number 09/542,897  
Filing Date April 4, 2000  
First Named Inventor Jerry H. Chisnell  
Examiner Name M. Rodgers  
Group Art Unit 3677  
Attorney Docket No. FTP141A US

## METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number 22-0212  
Deposit Account Name VanOphem & VanOphem, P.C.

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	740	201	370	Utility filing fee	
106	330	206	165	Design filing fee	
107	510	207	255	Plant filing fee	
108	740	208	370	Reissue filing fee	
114	160	214	80	Provisional filing fee	

SUBTOTAL (1) (\$)

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Extra Claims Fee from below Fee Paid  
Total Claims -20\*\* = X =  
Independent Claims -3\*\* = X =  
Multiple Dependent =

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
103	18	203	9	Claims in excess of 20
102	84	202	42	Independent claims in excess of 3
104	280	204	140	Multiple dependent claim, if not paid
109	84	209	42	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	920	217	460	Extension for reply within third month	
118	1,440	218	720	Extension for reply within fourth month	
128	1,960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	\$320.00
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279	370	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 320.00)

## SUBMITTED BY

Name (Print/Type) Remy J. VanOphem

Registration No. 27053  
(Attorney/Agent)

## Complete (if applicable)

Telephone 248-362-1210

Signature

Date September 25, 2002

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED  
OCT 07 2002

#9/  
B4/  
199/02



BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No. 09/542,897 Examiner: M. Rodgers  
Inventor: J. Chisnell Group Art Unit: 3677  
Filing Date: April 4, 2000 Date: November 30, 2001  
Title: Composite Sleeve For Sealing A Tubular Coupling

\*\*\*\*\*

Appeal Brief under 37 CFR §1.192

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

This is an Appeal of the Examiner's final rejection dated April 26, 2002, Paper No. 5. This brief is being filed in triplicate with the associated fee under 37 CFR §1.17(c) in the amount of \$320.00. All applicable extension of time fees were previously paid. If any further fee is deemed to be due, the Commissioner is hereby authorized to charge same to the undersigned's Deposit Account No. 22-0212.

REAL PARTY IN INTEREST

The real party in interest is Automotive Fluid Systems, Inc. as the assignee  
in this application.

10/02/2002 CNGUYEN 00000030 09542897

01 FC:120

320.00 DP

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences that will directly affect or be  
affected by or having a bearing on the Board's decision in this Appeal.

RECEIVED  
OCT 07 2002  
GROUP 3600

### STATUS OF THE CLAIMS

The status of the Claims as determined by the Examiner in the Final Office Action dated April 26, 2002, Paper No. 5, is as follows:

- a) Claims 1-13 and 15 are pending;
- b) Claim 14 was withdrawn; and
- c) Claims 1-13 and 15 stand finally rejected under 35 USC §102(b).

### STATUS OF AMENDMENTS

A reply to the Examiner's final rejection was filed on June 20, 2002 requesting the Examiner's reconsideration of the final claim rejections under 35 U.S.C. §102. In an Advisory Action dated July 22, 2002, Paper No. 7, the Examiner continued the 35 U.S.C. §102 rejection of Claims 1 through 13 and 15, and indicated that the 37 C.F.R §1.116 Amendment would be entered for purposes Appeal.

### SUMMARY OF THE INVENTION

Generally, Appellant's invention discloses a composite sleeve seal (20) that can easily be slipped over the end of a tube (44), that does not necessitate expensive processes involving machining O-ring grooves in a tube end, and that provides a seal that is superior to that achievable with conventional O-rings.

The composite sleeve seal (20) is made up of a body portion (22) having spaced apart collar sections (24) that are annular or ring-like in form. The collar sections (24) have a common inside diameter (24I) and outside diameter (24O). One of the collar sections (24) may also have a tapered portion (26) having a tapered surface (28). The collar sections (24) are interconnected by link segments (30). The link segments (30) are

circumferentially equally spaced apart as shown in Figure 3 or Alternatively as shown in the preferred embodiment of Figure 2 the link segments are integral with each of the collar sections which they connect such that the entire body portion (22) is constructed of one continuous material. The collar sections (24) are contiguous with seal portions (32) that are also annular or ring-like in form. The seal portions (32) interpose the collar sections (24) and abut the link segments (30) such that the seal portions (32) are positively interlocked with the body portion (22). The composite sleeve seal (20) may be positioned directly between a male tubular member and a female coupling member creating a seal therebetween without conventional O-rings, machined grooves, ridges, or ribs on either the male component or the female component.

The sleeve seal (20) of the present invention is additionally suitable for a variety of tube end-forming applications, such as the block connection (10). The sleeve seal (20) is adapted to surround and engage a male tube (44) that is held to a male connecting block (42) by a roll formed annular upset bead (48). The block connection (10) includes a female block assembly (60) having a throughbore (66), a chamfer (68) and a transition surface (70) therebetween. The sleeve seal (20) is disposed between the male tube (44) and the throughbore (66) of the female connecting block (60). The seal portions (32) are radially compressed between the male tube (44) and female connecting block (62) and axially restrained by the collar sections (24) to form the primary seal.

Additionally, the tapered surface (28) of the tapered portion (26) of the sleeve seal (20) is adapted to locate against the transition surface (70) of the female connecting block (62) such that the transition surface (70) engages in annular line contact against the tapered surface (28) to create a secondary seal of the fluid-tight block connection (10). The line contact also forces the components to balance the sealing load

concentrically about the centerline of the tube diameter thereby avoiding side-load types of failures.

### ISSUE

The sole issue to be resolved in this appeal is as follows:

Are Claims 1-13 and 15 as finally rejected under 35 U.S.C. §102(b) unpatentable as being anticipated by Baron, U.S. Patent 6,260,851 (WO97/16670).

### GROUPING OF THE CLAIMS

For each ground of rejection that applies to more than one claim, such additional claims, to the extent separately identified and argued below, do not stand or fall together.

### ARGUMENT

The Rejection of Claims 1-13 and 15 under 35 U.S.C. §102(b) as being anticipated by Baron, U.S. Patent 6,260,851 (WO97/16670) is Improper as a Matter of Law and this Issue Should be Resolved in Appellant's Favor

The Examiner rejected Claims 1-13 and 15 under 35 U.S.C. §102(b) as being anticipated by Baron, U.S. Patent 6,260,851 (WO97/16670). Appellant's attorney respectfully traverses the Examiner's 35 U.S.C. §102 rejection in view of the following argument.

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. §102, is whether the reference discloses all the elements of the claimed combination, or the mechanical equivalents thereof, functioning in substantially the same way to produce substantially the same results. As noted by the Court of Appeals

of the Federal Circuit in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. §102, the Court stated:

“Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.”

Appellant's independent Claims 1, 2, 8, and 15 all require:

“1. A composite sleeve seal comprising:  
**a body portion including at least one collar section having at least one link segment extending therefrom; and**  
**at least one seal portion contiguous with said at least one collar section and surrounding said at least one link segment to interlock said at least one seal portion with said body portion to form said composite sleeve seal as one integral component.”**

“2. A composite sleeve seal for sealing a conduit connection, said composite sleeve seal comprising:  
**a body portion including a plurality of collar sections spaced apart from one another to define at least one gap therebetween, said collar sections being interconnected by at least one link segment spanning said at least one gap; and**  
**at least one seal portion interposed said plurality of collar sections in said at least one gap and surrounding said at least one link segment to interlock said at least one seal portion with said body portion to form said composite sleeve seal as one integral component.”**

“8. A fluid-tight conduit connection comprising:  
a female component;  
a male component positioned within said female component such that said female component circumscribes said male component; and  
a composite sleeve seal circumscribing said male component such that said composite sleeve seal is interposed said male and female components for sealing said fluid-tight conduit connection, said composite sleeve seal comprising:  
**a body portion including a plurality of collar sections interconnected by at least one link segment; and**

**at least one seal portion interposed said plurality of collar sections and surrounding said at least one link segment to interlock said at least one seal portion with said body portion to integrate said composite sleeve seal;**  
whereby said at least one seal portion is compressed by said male and said female components to primarily seal said fluid-tight conduit connection.”

“15. A composite sleeve seal comprising:  
**a body portion including at least one collar section having at least one link segment extending therefrom; and**  
**at least one seal portion disposed in axial prolongation with respect to said at least one collar section, said at least one seal portion being molded around at least a portion of said at least one link segment to interlock said at least one seal portion with said body portion to form said composite sleeve seal as one integral component.”**

It is respectfully asserted that Baron fails to disclose each and every element of Appellant’s independent claims, arranged as in the claims. Specifically, Baron fails to disclose the arrangement of elements claimed in independent Claims 1, 2, 8 and 15. The Examiner indicated in the Final Office Action of April 26, 2002, paper number 5, that Baron elements (18) and (21) of the embodiment depicted in Figure 2 disclose Appellant’s body portion having a plurality of collar portions and a plurality of seal portions, and that element (47) of a different embodiment depicted in Figure 5 discloses Appellant’s link segments. It is respectfully suggested that the Examiner improperly combines elements from unrelated configurations resulting in an embodiment that was never envisioned by Baron. The Examiner selects individual elements from multiple discrete embodiments without addressing the structural interrelationships therebetween or considering the functionality to determine whether the same results are obtained as is required under *Lindemann, supra*.



*Lindemann*, supra provides that anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, **arranged as in the claim**. Appellant's independent Claim 1 discloses at least one link segment extending from at least one collar, and at least one link segment being surrounded by at least one seal portion. Appellant's independent Claims 2 and 8 disclose at least one link segment interconnecting a plurality of collar sections, and at least one link segment being surrounded by at least one seal portion. Appellant's independent Claim 15 discloses at least one link segment extending from at least one collar, and at least one seal portion being molded around at least a portion of at least one link segment. It is respectfully suggested that the Examiner's rejection relying on elements (18) and (21) depicted Figure 2 and element (47) depicted in Figure 5 of Baron does not disclose the structural interrelationship of elements claimed in independent Claims 1, 2, 8 and 10, and recited hereinabove. It is further suggested that there is in fact no disclosure whatsoever describing the structural interrelationship of elements (18,21) depicted Figure 2 and element (47) depicted in Figure 5 as no such combination was disclosed.

Page 3, Lines 7-10 of the Final Office Action of April 26, 2002, paper number 5 provides "Barron shows, in a combination of the embodiments shown in Figures 2 and 5, a composite sleeve seal comprising a body portion (16,19) including a plurality of collar sections (numbered 51 in Figure 5) spaced apart by at least one gap and having at least one link segment (47) defined therefrom..." It is respectfully suggested that the Examiner again improperly combines elements from unrelated configurations resulting in an embodiment that was never disclosed by Baron, without addressing the structural interrelationships therebetween or considering the functionality to determine whether the same results are obtained as is required under *Lindemann*, supra. It is further suggested

that the elements identified by the Examiner in the rejection do not disclose Appellant's claimed elements as will be discussed hereinafter.

It is respectfully suggested that Baron element (51) depicted in Figure 5 does not disclose a plurality of collar sections as indicated by the Examiner on Page 3, Line 9. Baron element (51), as shown in Figure 5, is a junction end (column 4, lines 63-65) and represents the end of the ring (50) in contact with the collar (42). The junction end (51) taught in Baron is described as straight (column 4, lines 64-65) and is an integral part of the ring (50), whereas Appellant's collar sections are defined on page 10, line 4 of the specification as being annular or ring-like in form. Therefore, the single "junction end 51" disclosed in Baron is clearly distinguishable from Appellant's claimed plurality of collar sections. It is further suggested that although the Examiner indicates on Page 3, Line 9 that the Baron reference discloses Appellant's at least one gap between collar sections, there is no indication as to specifically where the at least one gap is or how a single junction end (51) can define a gap.

Baron fails to disclose a composite seal having at least one link segment extending from a body portion as required by Appellant's independent Claims 1 and 15. First, the "portions 47" in Baron are not link segments. Second, even if the "portions 47" in Baron are viewed as link segments, they do not extend from the body portion (ring 50). Rather, they extend from the O-ring (collar 42).

In response to Appellant's position that "portions 47" in Baron are not link segments, the Examiner asserted on page 4, line 10 that "the portions (47) frictionally link seal portion (42) and collar portion (51) together." The Examiner points to no support in the specification for his position, and in fact the portions (47) are adapted to frictionally

engage the connector (58) of the pipe (column 5, lines 3-4) and not to link the seal portion and the collar portion as stated by the Examiner.

In response to Appellant's position that even if the portions (47) in Baron are viewed as link segments, they do not extend from the body portion (ring 50), the Examiner stated on page 4, line 12 that "the portions (47) do originate at collar portions (51) and extend therefrom." As previously stated hereinabove, the junction end 51 disclosed in Baron is not a mechanical equivalent to Appellant's collar portions. Furthermore, the portions (47) are integral with the collar (42) (column 4, lines 53-60, Baron, *supra*) such that the portions (47) originate from the collar (42) and not the junction end (51). Additionally, the specific basis for the Examiner's position that the portions (47) originate at the junction end (51) of the ring (50) is unclear as the Examiner has not provided any support in the prior art specification to justify his position.

Baron fails to disclose an arrangement of elements wherein a composite seal has a seal portion surrounding the link segments of the body portion to interlock the seal portion to the body portion as required in Appellant's independent Claims 1, 2 and 8. First, the elastomeric double O-ring (collar 42) of Baron does not surround any part of the body portion (ring 50). At best, the elastomeric double O-ring (collar 42) of Baron axially prolongates the body portion (50) of Baron, and perhaps covers a portion of the inside diameter of the body portion (50) of Baron. Second, the elastomeric double O-ring (collar 42) of Baron is not interlocked to the body portion (50). At best, the elastomeric double O-ring (collar 42) of Baron is surface mounted to the body portion (50). Thus, Baron fails to disclose the composite seal element and arrangement thereof as specifically claimed by Appellant in independent Claims 1, 2 and 8.

In response to Appellant's position that the O-ring (collar 42) of Baron does not surround any part of the body portion (ring 50), the Examiner asserted on page 4, lines 13-18, that "at the point designated by reference numeral (49), the seal portion (42) surrounds the portion of the link segment (47) that extends beyond the collar (51) and becomes flush with the seal portion (42) where the link segment (47) originates just beyond collar (52) and extends in a direction tangential to the curvature of the seal portion (42)." The Examiner's position relies on the unsupported assumption that the link segment (47) extends beyond the collar (51), which is inherently subjective because the portions (47) and collar (42) are integral and it is impossible to determine precisely where the portions (47) begin based solely on Figure 5. Baron column 4, lines 53-60 provides "The collar 42 comprises, furthermore, an end part 46 in the form of portions 47... which are attached at one end 48 to the lower face 49 of the 8-shaped collar part with which they are integral." As the portions (47) attach at the end (48) to the lower face (49), they do not extend beyond the end (48). As seen in Figure 5, since the portions (47) do not extend beyond (48), they also do not extend beyond (51) and therefore cannot be surrounded by the collar (42) as suggested by the Examiner.

In response to Appellant's position that the O-ring of Baron is not interlocked to the body portion of Baron, the Examiner asserted on page 4, lines 18-20, that "the link segments (47) are clearly shown as being in contact with body portion (50) and therefore must at least frictionally interlock the body portion (50)." As previously indicated, the portions (47) are adapted to frictionally engage the connector (58) of the pipe (column 5, lines 3-4) and not to link the seal portion and the collar portion as concluded by the Examiner. The Examiner again appears to read facts into the specification of the prior art reference without providing any basis or support therefor.

Appellant's attorney again cautions that the Baron reference confuses the terms ring and collar throughout the entire patent. For example, in the Baron abstract and the front page figure to which it pertains, the collar (6) is sleeve-like and composed of rigid material, and the ring (5) is an O-ring and is composed of elastomeric material. In contrast, the specification refers to Figure 5 in describing the collar (42) as a double O-ring that is composed of elastomeric material, and in describing the ring (50) as sleeve-like and composed of rigid material. Clearly, the terms ring and collar have been transposed and thus are confused in Baron. Nevertheless, Baron still fails to disclose the composite seal as specifically claimed by Appellant.

Based upon the above argument, Appellant respectfully submits that the Baron reference does not disclose each and every element arranged as in the claim of any of Appellant's independent claims. Therefore, in applying the test for anticipation as set forth in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick*, supra, Baron does not anticipate Appellant's independent Claims 1, 2, 8 or 15.

The rejection of dependent Claim 3 under 35 U.S.C. §102(b) is not well taken in view of the fact that dependent claims are but further delineations of the structure of the claims from which they depend. Claim 3 requires the combination of elements of the structure as set forth in independent Claim 2 with the additional limitation that the plurality of collar sections are made of plastic material and the at least one seal portion is made of rubber material.

As previously shown, Appellant's independent Claim 2 requires structural elements which are not disclosed by the Baron reference and is therefore patentably distinct. Accordingly, the structure of Claim 3 in combination with the structural elements

of Claim 2 must also be patentably distinct and is not anticipated by the disclosure of Baron.

The rejection of dependent Claim 4 under 35 U.S.C. §102(b) is not well taken in view of the fact that dependent claims are but further delineations of the structure of the claims from which they depend. Claim 4 requires the combination of elements of the structure as set forth in independent Claim 2 with the additional limitation that the at least one link segment comprises three link segments interconnecting each of the plurality of collar sections together.

As previously shown, Appellant's independent Claim 2 requires structural elements which are not disclosed by the Baron reference and is therefore patentably distinct. Accordingly, the structure of Claim 4 in combination with the structural elements of Claim 2 must also be patentably distinct and is not anticipated by the disclosure of Baron.

The rejection of dependent Claim 5 under 35 U.S.C. §102(b) is not well taken in view of the fact that dependent claims are but further delineations of the structure of the claims from which they depend. Claim 5 requires the combination of elements of the structure as set forth in Claims 2 and 4, with the additional limitation that the three link segments extend axially between each of the plurality of collar sections.

As previously shown, Appellant's independent Claim 2 requires structural elements which are not disclosed by the Baron reference and is therefore patentably distinct. Accordingly, the structure of Claim 5 in combination with the structural elements of Claims 2 and 4 must also be patentably distinct and is not anticipated by the disclosure of Baron.

The rejection of dependent Claim 6 under 35 U.S.C. §102(b) is not well taken in view of the fact that dependent claims are but further delineations of the structure of the claims from which they depend. Claim 6 requires the combination of elements of the structure as set forth in Claims 2, 4 and 5, with the additional limitation that the three link segments are circumferentially spaced 120 degrees apart.

As previously shown, Appellant's independent Claim 2 requires structural elements which are not disclosed by the Baron reference and is therefore patentably distinct. Accordingly, the structure of Claim 6 in combination with the structural elements of Claims 2, 4 and 5 must also be patentably distinct and is not anticipated by the disclosure of Baron.

The rejection of dependent Claim 7 under 35 U.S.C. §102(b) is not well taken in view of the fact that dependent claims are but further delineations of the structure of the claims from which they depend. Claim 7 requires the combination of elements of the structure as set forth in independent Claim 2 with the additional limitation that one of the plurality of collar sections includes a tapered portion having a tapered surface thereon.

As previously shown, Appellant's independent Claim 2 requires structural elements which are not disclosed by the Baron reference and is therefore patentably distinct. Accordingly, the structure of Claim 7 in combination with the structural elements of Claim 2 must also be patentably distinct and is not anticipated by the disclosure of Baron.

The rejection of dependent Claim 9 under 35 U.S.C. §102(b) is not well taken in view of the fact that dependent claims are but further delineations of the structure of the claims from which they depend. Claim 9 requires the combination of elements of the structure as set forth in independent Claim 8, with the additional limitation that the at least

one link segment comprises three link segments interconnecting each of the plurality of collar section.

As previously shown, Appellant's independent Claim 8 requires structural elements which are not disclosed by the Baron reference and is therefore patentably distinct. Accordingly, the structure of Claim 9 in combination with the structural elements of Claim 8 must also be patentably distinct and is not anticipated by the disclosure of Baron.

The rejection of dependent Claim 10 under 35 U.S.C. §102(b) is not well taken in view of the fact that dependent claims are but further delineations of the structure of the claims from which they depend. Claim 10 requires the combination of elements of the structure as set forth in Claims 8 and 9, with the additional limitation that the three link segments extend axially between each of the plurality of collar sections.

As previously shown, Appellant's independent Claim 8 requires structural elements which are not disclosed by the Baron reference and is therefore patentably distinct. Accordingly, the structure of Claim 10 in combination with the structural elements of Claims 8 and 9 must also be patentably distinct and is not anticipated by the disclosure of Baron.

The rejection of dependent Claim 11 under 35 U.S.C. §102(b) is not well taken in view of the fact that dependent claims are but further delineations of the structure of the claims from which they depend. Claim 11 requires the combination of elements of the structure as set forth in Claims 8, 9 and 10, with the additional limitation that the three link segments are circumferentially spaced 120 degrees apart.

As previously shown, Appellant's independent Claim 8 requires structural elements which are not disclosed by the Baron reference and is therefore patentably



distinct. Accordingly, the structure of Claim 11 in combination with the structural elements of Claims 8, 9 and 10 must also be patentably distinct and is not anticipated by the disclosure of Baron.

The rejection of dependent Claim 12 under 35 U.S.C. §102(b) is not well taken in view of the fact that dependent claims are but further delineations of the structure of the claims from which they depend. Claim 12 requires the combination of elements of the structure as set forth in independent Claim 8, with the additional limitation that the female component includes a mounting surface and a throughbore extending through the female component, the throughbore having a chamfer in the mounting surface, the chamfer and throughbore defining a transition surface therebetween.

As previously shown, Appellant's independent Claim 8 requires structural elements which are not disclosed by the Baron reference and is therefore patentably distinct. Accordingly, the structure of Claim 12 in combination with the structural elements of Claim 8 must also be patentably distinct and is not anticipated by the disclosure of Baron.

The rejection of dependent Claim 13 under 35 U.S.C. §102(b) is not well taken in view of the fact that dependent claims are but further delineations of the structure of the claims from which they depend. Claim 13 requires the combination of elements of the structure as set forth in Claims 8 and 12, with the additional limitation that one of the plurality of collar sections includes a tapered portion having a tapered surface, the tapered surface locating against the transition surface of the female component such that the transition surface engages in annular line contact against the tapered surface to secondarily seal the fluid-tight conduit connection.

As previously shown, Appellant's independent Claim 8 requires structural elements which are not disclosed by the Baron reference and is therefore patentably distinct. Accordingly, the structure of Claim 13 in combination with the structural elements of Claims 8 and 12 must also be patentably distinct and is not anticipated by the disclosure of Baron.


CONCLUSION

For the reasons set forth above, it is respectfully submitted that the rejection of Claims 1-13 and 15 under 35 U.S.C. §102(b) is improper as a matter of law, and reversal of the final rejection of the Claims as appealed is therefore respectfully requested.

An Appendix that contains the claims on appeal, as pending at the time of the final rejection, is enclosed herewith.

Respectfully submitted,

VANOPHEM & VANOPHEM, P.C.

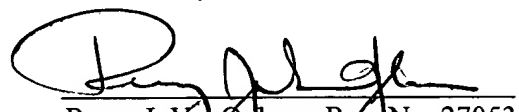
  
Remy J. VanOphem  
Registration No. 27053

755 W. Big Beaver Rd.  
Suite 1313  
Troy, MI 48084-4903  
(248) 362-1210  
Attorney Docket: FTP141A US

Certificate under 37 CFR §1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on September 25, 2002.

Date: September 25, 2002

  
Remy J. VanOphem, Reg. No. 27053



## Appendix

1. A composite sleeve seal comprising:  
a body portion including at least one collar section having at least one link segment extending therefrom; and  
at least one seal portion contiguous with said at least one collar section and surrounding said at least one link segment to interlock said at least one seal portion with said body portion to form said composite sleeve seal as one integral component.
2. A composite sleeve seal for sealing a conduit connection, said composite sleeve seal comprising:  
a body portion including a plurality of collar sections spaced apart from one another to define at least one gap therebetween, said plurality of collar sections being interconnected by at least one link segment spanning said at least one gap; and  
at least one seal portion interposed said plurality of collar sections in said at least one gap and surrounding said at least one link segment to interlock said at least one seal portion with said body portion to form said composite sleeve seal as one integral component.
3. A composite sleeve seal as claimed in claim 2 wherein said plurality of collar sections are made of plastic material and said at least one seal portion is made of rubber material.
4. A composite sleeve seal as claimed in claim 2, wherein said at least one link segment comprises three link segments interconnecting each of said plurality of collar sections together.

5. A composite sleeve seal as claimed in claim 4, wherein said three link segments extend axially between each of said plurality of collar sections.

6. A composite sleeve seal as claimed in claim 5, wherein said three link segments are circumferentially spaced 120 degrees apart.

7. A composite sleeve seal as claimed in claim 2, wherein one of said plurality of collar sections includes a tapered portion having a tapered surface thereon.

8. A fluid-tight conduit connection comprising:

- a female component;
- a male component positioned within said female component such that said female component circumscribes said male component; and
- a composite sleeve seal circumscribing said male component such that said composite sleeve seal is interposed said male and female components for sealing said fluid-tight conduit connection, said composite sleeve seal comprising:
  - a body portion including a plurality of collar sections interconnected by at least one link segment; and
  - at least one seal portion interposed said plurality of collar sections and surrounding said at least one link segment to interlock said at least one seal portion with said body portion to integrate said composite sleeve seal;

whereby said at least one seal portion is compressed by said male and said female components to primarily seal said fluid-tight conduit connection.

9. A fluid-tight conduit connection as claimed in claim 8, wherein said at least one link segment comprises three link segments interconnecting each of said plurality of collar sections together.

10. A fluid-tight conduit connection as claimed in claim 9, wherein said three link segments extend axially between each of said plurality of collar sections.

11. A fluid-tight conduit connection as claimed in claim 10, wherein said three link segments are circumferentially spaced 120 degrees apart.

12. The fluid-tight conduit connection as claimed in claim 8, wherein said female component includes a mounting surface and a throughbore extending through said female component, said throughbore having a chamfer in said mounting surface, said chamfer and said throughbore defining a transition surface therebetween.

13. The fluid-tight conduit connection as claimed in claim 12, wherein one of said plurality of collar sections includes a tapered portion having a tapered surface, said tapered surface locating against said transition surface of said female component such that said transition surface engages in annular line contact against said tapered surface to secondarily seal said fluid-tight conduit connection.

15. A composite sleeve seal comprising:  
a body portion including at least one collar section having at least one link segment extending therefrom; and  
at least one seal portion disposed in axial prolongation with respect to said at least one collar section, said at least one seal portion being molded around at least a portion of said at least one link segment to interlock said at least one seal portion with said body portion to form said composite sleeve seal as one integral component.